



# STIC Search Report

EIC 3700

STIC Database Tracking Number: 146159

**TO:** Andres Kashnikow  
**Location:** RND 8A29  
**Art Unit:** 3700  
**Friday, February 25, 2005**

**Case Serial Number:** 09/512593

**From:** John Sims  
**Location:** EIC 3700  
**RND 8B31**  
**Phone:** 571 272-3507

**john.sims@uspto.gov**

## Search Notes

NO LITIGATION FOUND for this patent.

Access DB# 146159

2/25/05

## SEARCH REQUEST FORM

### Scientific and Technical Information Center

Requester's Full Name: ANDY KASHNICKOW Examiner #: 60484 Date: 2/25/05  
Art Unit: 3700 Phone Number 27-4361 Serial Number: 09/512,593  
Mail Box and Bldg/Room Location: 2ND 8A 29 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

L.T. SEARCH — U.S. PATENT NO.  
5,876,345

#### STAFF USE ONLY

Searcher: Jeanne Cimino  
Searcher Phone #: 23-407  
Searcher Location: RND 8B  
Date Searcher Picked Up: 02/25/05  
Date Completed: 02/25/05  
Searcher Prep & Review Time: 10  
GPO Prep Time: \_\_\_\_\_  
Online Time: 20

#### Type of Search

NA Sequence (#)	STN
AA Sequence (#)	Dialog
Structure (#)	Questel/Orbit
Bibliographic	DerLink
Litigation	Lexis/Nexis
Fulltext	Sequence Systems
Patent Family	WWW/Internet
Other	Other (specify)

LITIGATION SEARCH: US 5876345 (Reissue 09/512593)

Files searched in Questel-Orbit : File PLUSPAT

?us5876345/pn

1/1 PLUSPAT - (C) QUESTEL-ORBIT- image  
CPIM (C) Questel-Orbit  
PN - US5876345 A 19990302 [US5876345]  
TI - (A) Ultrasonic catheter, system and method for two dimensional imaging or three-dimensional reconstruction  
PA - (A) ACUSON (US)  
PA0 - Acuson Corporation, Mountain View CA [US]  
IN - (A) EATON JOHN W (US); HOSSACK JOHN A (US)  
AP - US80762197 19970227 [1997US-0807621]  
PR - US80762197 19970227 [1997US-0807621]  
IC - (A) A61B-008/00  
EC - A61B-008/12D  
- G01S-015/89D1C  
- G01S-015/89D1E  
- G01S-015/89D2B1  
ICO - S01S-007/52S2E  
- S01S-015/89D9  
PCL - ORIGINAL (O) : 600466000; CROSS-REFERENCE (X) : 600463000  
DT - Corresponding document  
CT - USRe30397; US4140022; US4241608; US4635293; US4841977; US4917097; US4937775; US4947852; US5000185; US5014710; US5070879; US5081993; US5103129; US5107844; US5127409; US5159931; US5161537; US5186176; US5186177; US5199437; US5211176; US5257629; US5273045; US5315512; US5325860; US5327895; US5345940; US5353354; US5368037; US5377682; US5398691; US5456259; US5469851; US5471988; US5487388; US5492125; US5497776; US5503153; US5517537; US5529070; US5538004; US5558091; US5566674; US5570691; US5575286; US5582173; US5590654; US5606975; US5608849; US5699805; US5704361; US5713363; US5724978; US5776067  
- Rosenfield et al., Three-Dimensional Reconstruction of Human Coronary and Peripheral Arteries from Images Recorded During Two-Dimensional Intravascular Ultrasound Examination, Circulation, vol. 84, No. 5, pp. 1938-1956, Nov. 1991.

"Early and Recent Intraluminal Ultrasound Devices," N. Bom et al., International Journal of Cardiac Images 4, pgs. 79-88. (1989).

Laurence N. Bohns et al., "A Novel Method For Angle Independent Ultrasonic Imaging of Blood Flow and Tissue Motion," (1991).

A. Shaulov et al., "Biplane Phased Array for Ultrasonic Medical Imaging," (1988), pp. 635-638.

Timothy C. Hodges et al., "Ultrasonic Three-Dimensional Reconstruction: In Vitro and In Vivo Volume and Area Measurement," (1994), pp. 719-729.

Hugh A. McCann et al., "Multidimensional Ultrasonic Imaging for Cardiology," (1988), pp. 1063-1072.

Elizabeth O. Ofili et al., "Three-Dimensional and Four-Dimensional Echocardiography," (1994), pp. 669-675.

J. Souquet et al., "Transesophageal Phased Array for Imaging the Heart," (1982), pp. 707-712.

LSI Logic, Appendix 2, "L64720 Video Motion Estimation Processor (MEP), "1 page.

ISO/IEC Standard (MPEG Video), "Introduction -Part 2: Video, "(1991) pp. 5-9.

Shinichi Tamura et al., "Three Dimensional Reconstruction of Echocardiograms Based on Orthogonal Sections, "(1985) pp. 115-124.

Frederich Dohery, M.D. et al., "SONOLINE .RTM.Elegra Ultrasound Imaging Platform and Extended Field of View XFOV.TM.Imaging," (1995), 4pages.

M. Belohlavek et al., "Multidimensional Ultrasonic Visualization in Cardiology," (1992) 1137-1145.

Dan Sapoznikov et al., "Left Ventricular Shape, Wall Thickness and Function Based on Three-Dimensional", pp. 195, 496-498.

U.S. application No. 08/874,792, Seward et al., filed Jun. 13, 1997.

O'Donnell, M., et al., "Synthetic Phased Array Imaging of Coronary Arteries with an Intraluminal Array, "IEEE Ultrasonics Symposium, pp. 1251-1254 (1995).

Gussenhoven, E. et al., "Displacement Sensing Device Enabling Accurate Documentation of Catheter Tip Position," Intravascular Ultrasound, pp. 157-166 (1993).

One page product brochure of Powerpace Enhancement Package, (date unknown).

Two page B&K Medical product brochure describing B&K 8558 transducer and B&K 8557 transducer, (date unknown).

STG - (A) United States patent

AB - An ultrasonic catheter having at least two ultrasonic arrays is provided which has good near and far field resolution and provides an outline of the heart chamber which assists in understanding and interpreting the images obtained by the catheter. Also the ultrasonic catheter allows three dimensional images to be constructed of the region examined by the catheter in a precise but facile manner.

1/1 LGST - (C) EPO

PN - US5876345 A 19990302 [US5876345]

AP - US80762197 19970227 [1997US-0807621]

ACT - 19970718 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: ACUSON CORPORATION 1220 CHARLESTON ROAD MOUNTAIN V; EFFECTIVE

DATE: 19970623

- 19970718 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST

OWNER: EATON, JOHN W.; EFFECTIVE DATE: 19970623

- 19970718 US/AS02-A

ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: HOSSACK, JOHN A.; EFFECTIVE DATE: 19970627

- 20000509 US/RF-A  
REISSUE APPLICATION FILED  
EFFECTIVE DATE: 20000223  
- 20000926 US/CC-A  
CERTIFICATE OF CORRECTION

UP - 2003-22

1/1 CRXX - (C) CLAIMS/RRX  
PN - 5,876,345 A 19990302 [US5876345]  
PA - Acuson Corp  
ACT - 20000223 REISSUE REQUESTED  
Issue Date of O.G.: 20000509  
Reissue Request Number: 09/512593  
Examination Group responsible for Reissue process: 3737  
- 20000926 CERTIFICATE OF CORRECTION

PATENT FAMILY SEARCH:

?fam us5876345/pn

1/3 PLUSPAT - (C) QUESTEL-ORBIT  
PN - AU6341298 A 19980918 [AU9863412]  
STG - (A) Open to public inspection  
TI - (A) Ultrasonic catheter, system and method for two-dimensional imaging or three-dimensional reconstruction  
PA - (A) ACUSON  
IN - (A) EATON JOHN W; HOSSACK JOHN A  
IC - (A) A61B-008/12  
AP - AU6341298 19980227 [1998AU-0063412]  
PR - WOUS9803841 19980227 [1998WO-US03841]  
- US80762197 19970227 [1997US-0807621]

2/3 PLUSPAT - (C) QUESTEL-ORBIT- image  
CPIM (C) Questel-Orbit  
PN - US5876345 A 19990302 [US5876345]  
STG - (A) United States patent  
TI - (A) Ultrasonic catheter, system and method for two dimensional imaging or three-dimensional reconstruction  
PA - (A) ACUSON (US)  
PA0 - Acuson Corporation, Mountain View CA [US]  
IN - (A) EATON JOHN W (US); HOSSACK JOHN A (US)  
IC - (A) A61B-008/00  
AP - US80762197 19970227 [1997US-0807621]  
PR - US80762197 19970227 [1997US-0807621]  
EC - A61B-008/12D  
- G01S-015/89D1C  
- G01S-015/89D1E  
- G01S-015/89D2B1  
ICO - S01S-007/52S2E  
- S01S-015/89D9  
PCL - ORIGINAL (O) : 600466000; CROSS-REFERENCE (X) : 600463000  
DT - Corresponding document

3/3 PLUSPAT - (C) QUESTEL-ORBIT- image

CPIM

PN - WO9837812 A1 19980903 [WO9837812]

STG - (A1) Publ. Of int. Appl. With int. Search rep

TI - (A1) ULTRASONIC CATHETER, SYSTEM AND METHOD FOR TWO-DIMENSIONAL IMAGING OR THREE-DIMENSIONAL RECONSTRUCTION

OTI - (A1) CATHETER ULTRASONORE, SYSTEME ET PROCEDE D'IMAGERIE BIDIMENSIONNELLE OU DE RECONSTRUCTION TRIDIMENSIONNELLE

PA - (A1) ACUSON (US); EATON JOHN W (US); HOSSACK JOHN A (US)

PA0 - ACUSON CORPORATION ; 1220 Charleston Road Mountain View, CA 94043 (US)  
(except US)  
- EATON, John, W. ; 1150 Guinda Street Palo Alto, CA 94301 (US) (only US)  
- HOSSACK, John, A. ; 144 Emerson Street #E Palo Alto, CA 94301 (US)  
(only US)

IN - (A1) EATON JOHN W (US); HOSSACK JOHN A (US)

IC - (A1) A61B-008/12

LA - ENGLISH (ENG)

AP - WOUS9803841 19980227 [1998WO-US03841]

PR - US80762197 19970227 [1997US-0807621]

EC - A61B-008/12D  
- G01S-015/89D1C  
- G01S-015/89D1E  
- G01S-015/89D2B1

ICO - S01S-007/52S2E  
- S01S-015/89D9

DS - AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK; EE;  
ES; FI; GB; GE; GH; GM; GW; HU; ID; IL; IS; JP; KE; KG; KP; KR; KZ; LC;  
LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU;  
SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; US; UZ; VN; YU; ZW;  
ARIPO Patent (GH; GM; KE; LS; MW; SD; SZ; UG; ZW); Eurasian Patent (AM;  
AZ; BY; KG; KZ; MD; RU; TJ; TM); European Patent (AT; BE; CH; DE; DK;  
ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE); OAPI Patent (BF; BJ;  
CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG)

DT - Basic

1/2 LEGALI - (C) EPO

PN - US5876345 A 19990302 [US5876345]

AP - US80762197 19970227 [1997US-0807621]

ACTE- 19970718 US/AS02-A  
ASSIGNMENT OF ASSIGNEE'S INTEREST  
OWNER: ACUSON CORPORATION 1220 CHARLESTON ROAD MOUNTAIN V; EFFECTIVE DATE: 19970623

- 19970718 US/AS02-A  
ASSIGNMENT OF ASSIGNEE'S INTEREST  
OWNER: EATON, JOHN W.; EFFECTIVE DATE: 19970623

- 19970718 US/AS02-A  
ASSIGNMENT OF ASSIGNEE'S INTEREST  
OWNER: HOSSACK, JOHN A.; EFFECTIVE DATE: 19970627

- 20000509 US/RF-A  
REISSUE APPLICATION FILED  
EFFECTIVE DATE: 20000223

- 20000926 US/CC-A  
CERTIFICATE OF CORRECTION

UP - 2003-22

2/2 LEGALI - (C) EPO

PN - WO9837812 A1 19980903 [WO9837812]

AP - WOUS9803841 19980227 [1998WO-US03841]

ACTE- 19980903 WO/AK [+]

DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT  
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH  
GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN  
YU ZW

- 19980903 WO/AL [+]

DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED  
APPLICATION WITH SEARCH REPORT

GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK  
ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE  
SN TD TG

- 19981203 WO/DFPE

REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH  
MONTH FROM PRIORITY DATE

- 19990127 WO/121

EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS  
APPLICATION

- 19990819 WO/WA [-]

WITHDRAWAL OF INTERNATIONAL APPLICATION

- 19991230 WO/REG; DE/8642 [-]

DE: IMPACT ABOLISHED FOR DE

<DE>

UP - 2003-22

SEARCH RESULTS: NO LITIGATION FOUND

1 of 1 DOCUMENT

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5876345

[Link to Claims Section](#)

March 2, 1999

**Ultrasonic catheter, system and method for two dimensional imaging or three-dimensional reconstruction**

**REISSUE:** Reissue Application filed Feb. 23, 2000 (O.G. May 9, 2000) Ex. Gp.: 3737; Re. S.N. 09/512,593, (O.G. May 9, 2000)

**CERT-CORRECTION:** September 26, 2000 - a Certificate of Correction was issued for this patent (O.G. September 26, 2000)

**APPL-NO:** 807621 (08)

**FILED-DATE:** February 27, 1997

**GRANTED-DATE:** March 2, 1999

**ENGLISH-ABST:**

An ultrasonic catheter having at least two ultrasonic arrays is provided which has good near and far field resolution and provides an outline of the heart chamber which assists in understanding and interpreting the images obtained by the catheter. Also the ultrasonic catheter allows three dimensional images to be constructed of the region examined by the catheter in a precise but facile manner.